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# CORBY
# URBAN DISTRICT COUNCIL

# ANNUAL REPORT

*of the*

## Medical Officer of Health

For the Year 1953

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# Urban District of Corby

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**Members of the Public Health Committee :**
1953 - 54

Councillor J. Wallace (*Chairman*).
Councillors Mrs. E. Marshall, A. M. McInulty, J. Scobbie,
Rev. A. B. Westcott, E. E. Wright and W. Young.

**Public Health Officers of the Local Authority :**

**Medical Officer of Health :**

JOHN TERENCE MURPHY, M.B., B.Ch., B.A.O., D.P.H.

Also holds the appointments of Medical Officer of Health to the Urban District Councils of Burton Latimer, Desborough and Rothwell and the Rural District of Kettering, and Assistant Medical Officer of Health and Assistant School Medical Officer to the Northamptonshire County Council.

**Chief Sanitary Inspector & Cleansing Superintendent :**

GEORGE H. WILKINSON, F.S.I.A., M.R.San.I.
(Meat & Foods).

JOHN DOUGLAS MITCHELL, A.R.San.I.
(Meat & Foods).
Additional Sanitary Inspector.

Public Health Department,
75 London Road,
KETTERING.

*May*, 1954.

*To the Chairman and Members of the*
*Corby Urban District Council.*

Mr. Chairman, Mrs. Marshall, and Gentlemen,

I have the honour to present my Annual Report on the Health and Sanitary Circumstances of the Urban District for 1953.

The Birth-Rate 27.48 has not been exceeded since 1944, 542 births represent the highest number of Live Births recorded.

The Crude Death-Rate 5.68 is very low and is accounted for by the peculiar age and sex distribution of the Corby population.

The Infantile Mortality Rate, which had remained relatively high (except for 1951), appears to be readjusting itself. It would appear that the present figure might be taken as the index which in future years will not be exceeded. This consideration is based on the ever widening services made available and which altogether combine to reduce Infant Mortality. These are the high standard of housing, antenatal, midwifery and health visiting services and the provision (in April, 1954) of the Nuffield Diagnostic Centre which will make more readily available the services of a considerable number of consultants. Among the fourteen infant deaths, eleven occurred during the first four weeks of life. These Neonatal Deaths are from factors which are similar to those causing Still Births and it is in this sphere that one would hope to secure lower incidence in future years.

The number of children immunised against Diphtheria and Whooping Cough is steadily increasing and this also applies to the number of school entrants who receive reinforcing injections. Mainly combined Diphtheria-Whooping Cough Vaccine is used and immunisation has been carried on throughout the summer months. I feel certain that the lower incidence of Whooping Cough is due to immunisation and this has been particularly noticed where in some families the non-immunised child developed Whooping Cough while the immunised child remained free.

I wrote in the introductory letter to 1951 Annual Report "the most important single item which a Council must strive to obtain is a clean atmosphere".—Since then circumstances have caused national interest to focus on the dangers associated with pollution of the atmosphere by smoke and grit but, in spite of the spate of meetings and reports on the subject, there appears to be no time limit to the intolerable conditions under which people must live in the vicinity of large steelworks.

A report by the Chief Sanitary Inspector on Atmospheric Pollution concerning the years 1949 to the end of 1953, is enclosed.

206 houses have been erected by the Council during the year and Corby Development Corporation have erected 373 houses—The number of applicants on the register at the end of the year was 1,367 which was 1,100 less than at the end of 1952.

A considerable number of problems associated with the rapid increase of the town are constantly requiring the close attention of several committees of the Council. The zeal and energy of the Chairman and Members of the Public Health Committee, who have dealt during the year with a large number of matters involving considerable capital expenditure, is worthy of record.

I must also express thanks to my colleagues for their help and co-operation during the year.

I am, your obedient servant,

J. T. MURPHY,

*Medical Officer of Health.*

## SUMMARY OF VITAL STATISTICS

The following is a summary of the principal statistics for the years 1949, 1950, 1951, 1952 and 1953.

| | 1949 | 1950 | 1951 | 1952 | 1953 |
|---|---|---|---|---|---|
| Area (acres) ... ... ... ... ... ... ... | 2,835 | 2,835 | 2,835 | 3,490 | 3,490 |
| Population (Registrar-General's estimate) ... ... ... ... ... ... | 13,970 | 15,700 | 17,000 | 18,250 | 19,720 |
| Number of Live Births ... ... ... | 282 | 380 | 409 | 449 | 542 |
| Legitimate ... ... ... ... ... ... | 264 | 367 | 389 | 427 | 524 |
| Illegitimate ... ... ... ... ... ... | 18 | 13 | 20 | 22 | 18 |
| Birthrate per 1,000 population ... ... | 20.18 | 24.20 | 24.05 | 24.60 | 27.48 |
| Number of Still Births ... ... ... | 8 | 6 | 11 | 11 | 12 |
| Legitimate ... ... ... ... ... ... | 8 | 6 | 11 | 8 | 9 |
| Illegitimate ... ... ... ... ... ... | — | — | — | 3 | 3 |
| Rate per 1,000 total (live and still) births ... ... ... ... ... ... ... | 27.58 | 15.54 | 26.19 | 23.91 | 21.66 |
| Rate per 1,000 population ... ... ... | 0.56 | 0.38 | 0.64 | 0.60 | 0.61 |
| Number of Deaths ... ... ... ... | 86 | 100 | 108 | 90 | 112 |
| Deathrate per 1,000 population ... ... | 6.15 | 6.36 | 6.35 | 4.93 | 5.68 |
| Death from Pregnancy, Childbirth and Abortion ... ... ... ... ... ... | — | — | 1 | — | 1 |
| Infantile Mortality rate per 1,000 live births ... ... ... ... ... ... ... | 35.28 | 36.84 | 17.11 | 33.41 | 25.83 |
| Neonatal Mortality rate per 1,000 live births ... ... ... ... ... ... ... | — | 26.31 | 9.78 | 22.27 | 20.30 |
| *Deaths from all forms of Tuberculosis | 8 | 6 | 3 | 4 | 4 |
| *Deaths from Pulmonary Tuberculosis | 7 | 6 | 2 | 2 | 3 |
| Deaths from Malignant Neoplasms ... | 14 | 13 | 21 | 12 | 18 |
| Deaths from Measles (all ages) ... ... | — | — | — | — | — |
| Deaths from Whooping Cough (all ages) | — | — | — | — | — |
| Deaths from Enteritis and Diarrhoea | 1 | 1 | — | — | 1 |
| Deaths from Enteritis and Diarrhoea under two years of age ... ... | 1 | 1 | — | — | 1 |
| Deaths from Acute Poliomyelitis and Polioencephalitis ... ... ... ... | 1 | — | — | — | — |

*Registrar-General's figures.

# BIRTH-RATE, DEATH-RATE AND ANALYSIS OF MORTALITY DURING THE YEAR, 1953

| | Rate per 1,000 Total Population | | Annual Death-rate per 1,000 Population | | | | | | | | | Rate per 1,000 live Births | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Live Births | Still Births | All Causes | Typhoid & Para-typhoid Fevers | Whooping Cough | Diph-theria | Tuber-culosis | Influenza | Small-Pox | Acute Poliomyelitis and Polio-encephalitis | Pneumonia | Diarr-hoea & Enteritis under 2 years | Total Deaths under 1 year |
| England and Wales ... | 15.5 | 0.35 | 11.4 | 0.00 | 0.01 | 0.00 | 0.20 | 0.16 | 0.00 | 0.01 | 0.55 | 1.1 | 26.8 |
| 160 County Boroughs and Great Towns (including London) | 17.0 | 0.43 | 12.2 | 0.00 | 0.01 | 0.00 | 0.24 | 0.15 | 0.00 | 0.01 | 0.59 | 1.3 | 30.8 |
| 160 Smaller Towns estd. resident populations, 25,000 — 50,000 ... ... ... | 15.7 | 0.34 | 11.3 | — | 0.00 | 0.00 | 0.19 | 0.17 | 0.00 | 0.01 | 0.52 | 0.9 | 24.3 |
| London ... ... ... | 17.5 | 0.38 | 12.5 | — | 0.00 | — | 0.24 | 0.15 | — | 0.01 | 0.64 | 1.1 | 24.8 |
| **Corby Urban District** ... | 24.18 | 0.61 | 11.42 | — | — | — | 0.20 | — | — | — | 0.20 | 0.05 | 25.83 |

| | Sepsis of pregnancy, childbirth and the puerperium | Abortion with toxaemia | Other toxaemias of pregnancy and the puerperium | Haemorrhage of pregnancy and childbirth | Abortion without mention of sepsis or toxaemia | Abortion with sepsis | Other complications of pregnancy, childbirth and the puerperium |
|---|---|---|---|---|---|---|---|
| The Maternal Mortality rates for : England and Wales per 1,000 (Live and Still) Births | 0.10 | 0.01 | 0.24 | 0.13 | 0.04 | 0.06 | 0.18 |
| **Corby Urban District** ... | — | — | — | 0.05 | — | — | — |

## SECTION A. Statistics and Social Conditions.

| | |
|---|---|
| Area (acres) | 3,490 |
| Registrar General's estimate of resident population | 19,720 |
| Number of inhabited houses (end of 1953) according to Rate Book | 5,851 |
| Rateable Value | £118,981 |
| Sum represented by Penny Rate | £413. 5. 1. |

The chief occupations of the district are: Iron and Steel workings, manufacture of clothing, and farming.

### Extracts from Vital Statistics for the Year :

| **LIVE BIRTHS** | *Total* | *Males* | *Females* |
|---|---|---|---|
| Legitimate | 524 | 249 | 275 |
| Illegitimate | 18 | 12 | 6 |
| TOTALS | 542 | 261 | 281 |

Birth-rate per 1,000 of the estimated population ... ... 27.48

| **STILL BIRTHS** | *Total* | *Males* | *Females* |
|---|---|---|---|
| Legitimate | 9 | 8 | 1 |
| Illegitimate | 3 | 2 | 1 |
| TOTALS | 12 | 10 | 2 |

Rate per 1,000 total (live and still) births ... ... ... 21.66

| **DEATHS** | *Total* | *Males* | *Females* |
|---|---|---|---|
| | 112 | 74 | 38 |

| | |
|---|---|
| Death-rate per 1,000 of the estimated resident population (crude) | 5.68 |
| Death-rate per 1,000 of the estimated population (corrected) | 11.41 |
| Death from Pregnancy, Childbirth and Abortion | 1 |
| Death-rate of infants under one year of age :— | |
| All infants per 1,000 live births | 25.83 |
| Legitimate infants per 1,000 legitimate live births | 24.81 |
| Illegitimate infants per 1,000 illegitimate live births | 55.56 |
| Deaths from Measles (all ages) | — |
| Deaths from Whooping Cough (all ages) | — |
| Deaths from Enteritis and Diarrhoea (under two years of age) | 1 |
| Deaths from Malignant Neoplasms | 18 |
| Deaths from Acute Poliomyelitis and Polioencephalitis | — |

**Deaths.**—Comparability factor for 1953 was 2.01. The crude death-rate per 1,000 population for 1953 was 5.68 which multiplied by the comparability factor of 2.01, supplied by the Registrar General, gives a corrected death-rate of 11.41. This rate of 11.41 is the rate which, it is assumed, would be arrived at if the age and sex distribution of the population of the Corby Urban District were distributed in the same proportion as that of England and Wales as a whole.

## LIVE BIRTH RATES, 1953

A comparability factor has been issued for 1953 by the Registrar General which allows for the different age and sex distribution of Corby and provides a basis for comparison with that of England and Wales as a whole.

| | |
|---|---|
| Corby ... ... ... ... ... | 27.48 |
| Corby corrected by comparability factor 0.88 ... ... ... ... ... | 24.18 |
| England and Wales ... ... ... | 15.5 |

## INFANTILE MORTALITY RATES, 1953

Infantile mortality is the number of deaths in children under one year of age per 1,000 live births. This is an indication of the environmental and social conditions of a community with special reference to housing, over-crowding, and maternity and child welfare.

| | |
|---|---|
| Corby ... ... ... ... ... | 25.83 |
| England and Wales ... ... ... | 26.8 |

**Neo-natal mortality** is the number of deaths in children under four weeks of age per 1,000 live births.

| | |
|---|---|
| Neo-natal death rate ... ... ... | 20.30 |

The causes of deaths in children under one year of age with age and sex distribution are given in the following table :—

## DEATHS OF INFANTS UNDER ONE YEAR OF AGE

| *Age* | *Sex* | *Cause of Death* |
|---|---|---|
| 30 minutes | F. | Immaturity. 29 weeks. |
| 1 hour | F. | Prematurity. |
| 6 hours | F. | Atelectasis and Prematurity. |
| 6 hours | M. | Lung Atelectasis and Prematurity. |
| 7 hours | M. | Cerebral Haemorrhage. |
| 7 hours | M. | Atelectasis and Prematurity. Maternal pyelitis and renal calculus. P.M. |
| 12 hours | F. | Atelectasis. |
| 1 day | M. | Prematurity. |
| 1 day | F. | Asphyxia Pallida. Accidental Haemorrhage. |
| 4 days | F. | Prematurity. 1 lb. 15½ ozs. |
| 2 weeks | F. | Meningitis and Congenital Meningoceles. |
| 2 months | M. | Sinus and choroid plexus thrombosis secondary to staphylococcus aureus and bacillus coli infection. |
| 10 months. | M. | Broncho Pneumonia. Congenital Spastic Paraplegia. |
| 10 months | F. | Acute Cardiac failure. Gastro-enteritis. P.M. |

The registered causes of death were as follows :—

| | | *Males* | *Females* | *Total* |
|---|---|---|---|---|
| All causes ... ... ... ... ... | | 74 | 38 | 112 |
| 1. | Tuberculosis, respiratory ... ... | 3 | — | 3 |
| 2. | Tuberculosis, other ... ... ... | 1 | — | 1 |
| 3. | Syphilitic disease ... ... ... | 2 | — | 2 |
| 4. | Diphtheria ... ... ... ... | — | — | — |
| 5. | Whooping Cough ... ... ... | — | — | — |
| 6. | Meningococcal infections ... ... | — | — | — |
| 7. | Acute poliomyelitis ... ... ... | — | — | — |
| 8. | Measles ... ... ... ... | — | — | — |
| 9. | Other infective and parasitic diseases | — | — | — |
| 10. | Malignant neoplasm stomach ... | 2 | 3 | 5 |
| 11. | Malignant neoplasm lung bronchus | 3 | 1 | 4 |
| 12. | Malignant neoplasm breast ... ... | — | — | — |
| 13. | Malignant neoplasm uterus ... ... | — | 1 | 1 |
| 14. | Other malignant & lymphatic neoplasms | 3 | 5 | 8 |
| 15. | Leukaemia, aleukaemia ... ... | 1 | — | 1 |
| 16. | Diabetes ... ... ... ... | — | 3 | 3 |
| 17. | Vascular lesions of nervous system | 5 | 5 | 10 |
| 18. | Coronary disease, angina ... ... | 13 | 1 | 14 |
| 19. | Hypertension with heart disease ... | 1 | — | 1 |
| 20. | Other heart disease ... ... ... | 5 | 3 | 8 |
| 21. | Other circulatory disease ... ... | — | 1 | 1 |
| 22. | Influenza ... ... ... ... | — | — | — |
| 23. | Pneumonia ... ... ... ... | 3 | 1 | 4 |
| 24. | Bronchitis ... ... ... ... | 7 | — | 7 |
| 25. | Other disease of the respiratory system | 3 | — | 3 |
| 26. | Ulcer and stomach duodenum ... | 1 | — | 1 |
| 27. | Gastritis, enteritis and diarrhoea ... | — | 1 | 1 |
| 28. | Nephritis and nephrosis ... ... | 2 | — | 2 |
| 29. | Hyperplasia of prostrate ... ... | 1 | — | 1 |
| 30. | Pregnancy, childbirth, abortion ... | — | 1 | 1 |
| 31. | Congenital malformations ... ... | — | 2 | 2 |
| 32. | Other defined and ill-defined diseases | 11 | 10 | 21 |
| 33. | Motor vehicle accidents ... ... | — | — | — |
| 34. | All other accidents ... ... ... | 6 | — | 6 |
| 35. | Suicide ... ... ... ... | 1 | — | 1 |
| 36. | Homicide and operations of war ... | — | — | — |

## SECTION B. General Provision of Health Services.

(a) **Laboratory facilities.**—Bacteriological examinations have been carried out by the Public Health Laboratory at Northampton and at the Kettering General Hospital.

| The following specimens were examined :— | 1953 |
|---|---|
| Swabs | 1 |
| Blood | — |
| Faeces | 9 |
| Ham | 1 |
| Cheese | 1 |

(b) **Ambulance facilities.**—The County Council is responsible for Ambulance Services. The St. John Ambulance Brigade carry out the service on behalf of the County Council for non-infectious cases.

(c) **Nursing in the Home.**—The County Council is responsible for the Home Nursing Service.

(d) **Treatment Centres and Clinics.**—A County Council Welfare Clinic is held twice weekly and an Ante-Natal Clinic is also held twice weekly.

## DIPHTHERIA IMMUNISATION

The number of children who were immunised in 1953 is as follows:

| | |
|---|---|
| Under 5 years | 389 |
| 5 to 14 years | 12 |
| TOTAL | 401 |
| Boosters | 189 |

The number of children who had completed a full course of immunisation at any time up to 31st December, 1953 is as follows :—

| Age at 31.12.53<br>i.e. Born in Year | Under 1<br>1953 | 1<br>1952 | 2<br>1951 | 3<br>1950 | 4<br>1949 |
|---|---|---|---|---|---|
| No. immunised | 26 | 302 | 303 | 311 | 268 |

| Age at 31.12.53<br>i.e. Born in Year | 5 - 9<br>1944 - 1948 | 10 - 14<br>1939 - 1943 | Total<br>under 15 |
|---|---|---|---|
| No. immunised | 1,086 | 1,206 | **3,502** |

## WHOOPING COUGH VACCINATION

| | Under 1 | 1 - 4 | 5 - 14 | Total |
|---|---|---|---|---|
| Whooping Cough only | 1 | 43 | 2 | 46 |
| *Combined Diphtheria/Pertussis | 91 | 231 | 1 | 323 |

*The combined Diphtheria/Pertussis figures are included in the figures for Diphtheria Immunisation.

## VACCINATION

The following table gives the number of vaccinations undertaken during the year :—

| | Under 1 | 1 - 4 | 5 - 14 | 15 or over | Total |
|---|---|---|---|---|---|
| Primary ... ... | 162 | 18 | 5 | 10 | 195 |
| Re-vaccination ... | — | 2 | 1 | 20 | 23 |

The treatment of Tuberculosis and Venereal Diseases is carried out by the Regional Hospital Board.

**National Assistance Act, 1948, Section 47.**—No formal action was taken during the year.

## SECTION C. Sanitary Circumstances of the Area.

**Water Supplies.**—The Mid-Northamptonshire Water Board is responsible for the Water Undertaking. The following samples of water supplies were taken during the year :—

| | |
|---|---|
| Public Mains ... | 5 |
| Private Well ... | 5 |
| Swimming Pool ... | 3 |

All were found satisfactory.

**Sewerage and Sewage Disposal.**—To meet the drainage needs of the Corby Development Corporation's extensive building (mainly of houses) in the southerly part of the Urban District, and as part of a scheme to afford relief to surcharged sewers in other parts of the District, a new trunk sewer in 33″, 30″ and 21″ concrete pipes was laid, extending from the outfall at the sewage treatment works 1½ miles westwards along the "south valley." This sewer was substantially complete at the end of the year and available for receiving sewage from the first houses to be occupied on the Corporation's Exeter Estate early in the following year.

The construction of a sewer in 21″ concrete pipes to divert drainage from the "middle valley" into the new "south valley" sewer, thus affording relief to the "middle valley" sewerage and providing for future development, was commenced, and good progress towards completion had been made by the end of the year. This cross-connecting sewer consists of 502 yards of pipes laid in tunnel heading and 180 yards in open-cut.

In anticipation of the Development Corporation's further building on their "Hazel Leys" Estate, a scheme for extending the recently complete "south valley" sewer was put in hand, with a view to submission for Ministry approval early in 1954.

The outline scheme for a new sewage treatment works, based on the system of double alternating filtration, and prepared by the Council's Consulting Engineers, was approved in principle by the Ministry.

Preparation of the detailed scheme, preliminary to obtaining tenders for the execution of the first instalment of the scheme (to be carried out in two stages), was placed in the hands of the Council's Engineer & Surveyor, and additional assistance engaged for the purpose. It is anticipated that progress in technical preparatory work will permit of the receipt of tenders about the middle of 1954.

The problems arising out of increased flows in natural drainage channels, consequent upon extensive development works and the resultant progressive increase in impermeable surface, were further examined and a technical report thereon was prepared by the Council's Engineer and Surveyor, for the information and guidance of the Council, and the information of the New Towns Division of the Ministry of Housing and Local Government. The probable effects of these increased flows downstream of the Urban District and the measures necessary to provide therefor were receiving the joint consideration of the technical officers of the Council, The Corby Development Corporation and the Nene River Board, and it is expected that it will be possible to report thereon at an early date to a meeting of representatives of these Authorities and that means of taking appropriate action will then be considered.

**Public Cleansing.**—The labour and transport difficulties experienced in the previous year had been mostly resolved, and the department operated very satisfactorily.

Street sweeping and cleaning was a major problem, but was partially overcome by the acquisition of a second mechanical sweeper/collector late in the year.

Trials are in progress with sample loads of compost in an endeavour to find whether this method of refuse disposal could be introduced. The trials are not yet complete.

## SECTION D. Public Health and Housing Acts.

Work under these Acts proceeded throughout the year and the following is a record of the routine work carried out :—

| | |
|---|---|
| (1) Inspections of dwelling houses during the year :— | |
| 1. (a) No. of houses inspected for defects ... ... | 7 |
| (b) Inspections made re above ... ... ... | 10 |
| 2. (a) Houses inspected under Regulations ... | 7 |
| (2) Houses rendered fit by informal action ... ... | 5 |
| Houses found unfit for human habitation ... ... | 2 |
| Demolition orders made ... ... ... ... | — |
| Undertaking given by owners not to relet ... ... | 2 |
| Overcrowding :— | |
| Number of houses overcrowded at 31st December, 1952 | 33 |
| Number of new cases found during year ... ... | 4 |
| Number of cases abated during year ... ... ... | 17 |
| Number of houses overcrowded at 31st December, 1953 | 20 |

New houses erected by Local Authority during 1953 :—

| | | |
|---|---|---|
| TRADITIONAL—2 bedrooms (Gregory Flats) | 20 | |
| 2 bedrooms (houses) | 97 | |
| | | 117 |
| 3 bedrooms (houses) | | 89 |
| Total number of houses erected during 1953 | | 206 |
| Total number of postwar houses erected up to 31st December, 1953 | | 2264 |
| APPLICATIONS— | | |
| Number of applications received during 1953 | | 848 |
| Estimated number of applications on register at 31st December, 1953 | | 1367 |

**Public Health Act, 1936.**—The following is a list of statutory notices served during the year :—

| | | *Complied with by* | |
|---|---|---|---|
| *Section* | *Nuisance* | *Owner* | *Local Authority* |
| 93 | Housing Defects | 4 | — |
| 39 | Drainage | 1 | — |

**Camps and Hostels.**—There is one camp and two hostels. The camp is of temporary construction and is only suitable for short-stay accommodation.

**Rodent Control.**—One statutory notice was served during the year under the Prevention of Damage by Pest Act 1949. After prior consultation, the work was carried out in conjunction with the County Agricultural Committee.

**Factories and Workshops.**—The following table shows the number of factories in the district and the number of inspections made and contraventions discovered and remedied during the year :—

## Factories Acts, 1937 and 1948

## Part 1 of the Act

1.—**Inspections** for purposes of provisions as to health (including inspections made by Sanitary Inspector).

| Premises (1) | Number on Register (2) | Number of Inspections (3) | Number of Written Notices (4) | Number of Occupiers Prosecuted (5) |
|---|---|---|---|---|
| (i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities | — | — | — | — |
| (ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority ... ... ... | 34 | 37 | 1 | — |
| (iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) ... | 20 | 22 | 3 | — |
| TOTAL ... ... | 54 | 59 | 4 | — |

## 2.—Cases in which defects were found.

| Particulars (1) | Number of cases in which defects were found: Found (2) | Remedied (3) | To H.M. Inspector (4) | By H.M. Inspector (5) | Number of cases in which Prosecutions were instituted (6) |
|---|---|---|---|---|---|
| Want of Cleanliness (S.1.) ... | — | — | — | — | — |
| Overcrowding (S.2.) ... ... | — | — | — | — | — |
| Unreasonable temperature (S.3) ... ... | — | — | — | — | — |
| Inadequate ventilation (S.4.) | — | — | — | — | — |
| Ineffective drainage of floors (S.6.) ... ... ... | — | — | — | — | — |
| Sanitary Conveniences (S.7.)— | | | | | |
| (a) insufficient ... ... | — | — | — | — | — |
| (b) Unsuitable or defective | 4 | 4 | — | — | — |
| (c) Not separate for sexes | — | — | — | — | — |
| Other offences against the Act (not including offences relating to Outwork) ... ... | — | — | — | — | — |
| TOTAL ... ... | 4 | 4 | — | — | — |

**Atmospheric Pollution.**—The main sources of Pollution are from the coke ovens, the Bessemer process and shunting of railway engines.

The following table shows the amount of deposit in tons per square mile in three selected areas :—

### ATMOSPHERIC POLLUTION

| | *Tons per sq. mile* | | | |
|---|---|---|---|---|
| *Month* | *Insoluble Deposits* | *Ash* | *Total Deposits* | *Mg. per* 100 sq./cm./day $SO_2$ |
| **Samuel Lloyd School—** | | | | |
| January | 3.59 | 2.56 | 11.19 | 1.50 |
| February | 32.98 | 25.02 | 41.06 | 1.27 |
| March | 18.08 | 15.20 | 27.88 | 1.41 |
| April | 10.90 | 8.00 | 16.34 | 0.75 |
| May | 23.78 | 19.33 | 33.05 | 0.65 |
| June | 7.68 | 5.02 | 15.24 | 0.46 |
| July | 7.80 | 5.35 | 14.17 | 0.28 |
| August | 7.84 | 4.25 | 18.87 | 0.48 |
| September | 16.52 | 9.77 | 22.95 | 1.01 |
| October | 11.47 | 9.41 | 18.98 | 1.28 |
| November | 4.90 | 2.97 | 7.80 | 1.36 |
| December | 39.59 | 33.03 | 54.66 | 1.44 |
| **Stanion Lane Water Company—** | | | | |
| January | 15.77 | 12.48 | 28.19 | 1.45 |
| February | 18.19 | 14.53 | 30.31 | 1.84 |
| March | 9.11 | 7.87 | 17.38 | 1.17 |
| April | 9.38 | 7.03 | 14.80 | 0.88 |
| May | 15.48 | 11.63 | 25.75 | 0.70 |
| June | 17.73 | 11.91 | 29.91 | 0.78 |
| July | 7.98 | 5.66 | 15.53 | 0.31 |
| August | 6.97 | 3.75 | 14.29 | 0.33 |
| September | 10.02 | 7.64 | 15.58 | 0.48 |
| October | 32.13 | 26.84 | 25.51 | 0.17 |
| November | 4.45 | 3.15 | 9.73 | 0.76 |
| December | 15.72 | 10.92 | 20.61 | 0.95 |
| **Rowlett Road Junior School—** | | | | |
| January | 4.95 | 3.05 | 9.95 | 1.42 |
| February | 12.12 | 9.11 | 17.42 | 1.17 |
| March | 9.19 | 8.72 | 15.16 | 1.38 |
| April | 6.28 | 4.93 | 9.65 | 0.75 |
| May | 11.00 | 8.39 | 15.71 | 0.42 |
| June | 5.61 | 3.64 | 10.20 | 0.46 |
| July | 7.92 | 4.65 | 13.71 | 0.30 |
| August | 4.02 | 2.83 | 7.96 | 0.47 |
| September | 8.00 | 5.75 | 11.20 | 0.80 |
| October | 5.09 | 8.26 | 9.31 | 1.35 |
| November | 5.37 | 3.73 | 9.68 | 1.49 |
| December | 9.36 | 7.19 | 16.09 | 1.51 |

## Interim Report on the Local Measurement of Air Pollution

*Submitted to the Council January,* 1954, *by the Chief Sanitary Inspector.*

1. This is an interim report because pollution figures should be studied at intervals of not less than five years. Under the circumstances, the report will be mainly factual.

2. Attached to the report are graphs of the measurements taken at three sites. It should be noted that there was a transfer of gauges from Clarke Road to Rowlett Road in December, 1952. For clarity, these sites will be designated "Rowlett Road." The graphs for the school and Rowlett Road sites are presented jointly for the purpose of comparison between sites in the same alignment with the works on its westerly side. The graphs for Stanion Lane have been kept separate purely to avoid confusion.

3. Records of wind direction are given in diagrammatic form. The length of line indicates the proportion of days in the particular year when the wind was from the relevant direction. It should be noted that, generally speaking, observations were made around mid-day each day, and that no allowance has been made for changes during the subsequent twenty-four hours.

### Standard Deposit Gauges

4. The main purpose of these gauges is to measure the solid pollutants. All the graphs show an erratic line, most pronounced in the school gauge. As this latter gauge reveals an overall highest figure, and because solids emitted to atmosphere invariably reach the ground close to their source, it is reasonable to presume that the great bulk of our solids pollution is from the steel works. It will also be noted that the monthly trends in the school and Rowlett gauges, contrary to expectations, do not always coincide. These phenomena are clearly illustrated for the months of April, 1950, January and June, 1951, and June and September, 1952. The Rowlett Road site (when in Clarke Road) was exposed to the ready collection of extraneous matters, e.g. from the burning of garden refuse. This may be a factor in the comparative discrepancies.

5. As regards the lack of co-ordination between the school and Stanion Lane sites, this can be accounted for by the distances between each site and the centre of the industrial pollution source, and the varying meteorological factors.

6. One of the main objects of our pollution measurements is to find the trend of the degree of pollution over the years. This information is best obtained from a study of the annual monthly means. Annual monthly mean is the average monthly figure for a period of twelve months.

**Annual monthly mean**
**Tons/square mile**

| Year (July-June) | Rowlett Road | School | Stanion Lane |
|---|---|---|---|
| 1949-50 | 14.65 | 28.20 | 22.10 |
| 1950-51 | 15.63 | 26.74 | 21.64 |
| 1951-52 | 15.11 | 32.23 | 21.65 |
| 1952-53 | 15.34 | 25.88 | 27.54 |

In view of the abnormal circumstances resulting in the exceptional figure for October, 1951, (the explosion in the blast furnace gas cleaning plant), the figure for October may be discarded and the annual mean obtained from the remaining eleven months. In this way we obtain a figure of 26.29. If this figure be substituted for that of 32.23, then the table for the school gauge shows a progressive reduction over the period of four years. On the other hand, the Stanion Lane gauge, after an initial decrease, shows a considerable increase in the fourth year, whereby it becomes higher than the school gauge. Nevertheless, it appears advisable to accept the trend shown in the school gauge.

7. As regards difference in degree of pollution in the Stephenson Way area and the North West estate, comparison of the averages of the tabulated annual means of the school and Rowlett Road gauges shows a reduction of 46% in pollution. Again, comparison of the graphs for all three sites for the period September-October, 1951 reveals that the exceptional grit emission had a much lesser effect on the outer gauges as compared with the school gauge. During this same period, of the fifty days on which a fairly consistent wind direction was noted, there were seventeen of S.E. winds and one of E. wind.

## Lead Peroxide Gauges

8. These gauges measure the sulphur dioxide in the atmosphere. The graphs of the Rowlett Road and School gauges show a clearly defined seasonal trend—high in winter, low in summer. The Stanion Lane gauge, whilst showing a similar trend, has several variations. If the steel works were to be considered the major source of $SO_2$ pollution, it is doubtful whether the gauges' graphs would show a similar seasonal trend. The position is confirmed by a study of the seasonal monthly means. In accordance with standard practice, the winter season includes the months November to March, and the summer season the months May to September. Figures for April and October are ignored. As figures up to and including September, 1953 are available, it is possible to give the seasonal monthly means for four successive complete seasons. (The Stanion Lane gauge did not come into use until July, 1949).

**Winter means in milligrammes per 100 sq. cms.**

| Year | Rowlett Road | School | Stanion Lane |
|---|---|---|---|
| 1949-50 | 0.71 | 1.12 | 0.99 |
| 1950-51 | 0.81 | 1.23 | 1.31 |
| 1951-52 | 0.92 | 1.32 | 1.29 |
| 1952-53 | 1.25 | 1.44 | 1.43 |

**Summer means in milligrammes per 100 sq. cms.**

| Year | Rowlett Road | School | Stanion Lane |
|---|---|---|---|
| 1950 | 0.28 | 0.41 | 0.51 |
| 1951 | 0.36 | 0.55 | 0.72 |
| 1952 | 0.34 | 0.53 | 0.67 |
| 1953 | 0.49 | 0.57 | 0.52 |

9. The most significant set of figures is that for winter at the Rowlett Road site which shows a progressive and fairly rapid increase in pollution. The same trend, but to a lesser degree is shown at the school site. The housing developments in the north west area and the prevailing westerly winds make it reasonable to presume that domestic fires are the source of this increase. This is confirmed by the clearly defined seasonal trend in sulphur pollution, previously noted. The figure to be obtained during the next few years from the Boys' Club and Lodge Green gauges, will be of considerable interest in this respect. (It should be noted here, that the highest concentrations, at ground level, of $SO_2$ emitted to atmosphere are found some distance from source, the height at which the gas is emitted being an important factor as regards the distance).

10. If each winter mean is compared with the following summer mean, we obtain very significant results.

| Rowlett Road | | | School | | |
|---|---|---|---|---|---|
| Winter | Summer | % decrease | % decrease | Summer | Winter |
| 0.71 | 0.28 | 60 | 60 | 0.41 | 1.12 |
| 0.81 | 0.36 | 55 | 55 | 0.55 | 1.23 |
| 0.92 | 0.34 | 63 | 60 | 0.53 | 1.32 |
| 1.25 | 0.49 | 60 | 60 | 0.57 | 1.44 |

As the decreases (or increases) are, for practical purposes the same for both sites, it is reasonable to presume that the increase in domestic smoke in the winter results in a corresponding increase in sulphur pollution over our residential areas ; and that this increase is some 55% - 60% each winter.

11. The percentages for the same periods at the Stanion Lane gauge bear no similar relationship, the figures being 52, 45, 49 and 63. It can be presumed that the bulk of the sulphur pollution produced by domestic fires will have a very varying effect upon this gauge, being dependent upon meteorological conditions. This would explain the variation in reduction percentages. On the other hand, the summer figures for this gauge could bear some relationship with industrial sulphur pollution. This would explain the absence of a progressive annual increase ; and also confirm our opinion that the remaining gauges provide figures which reflect the domestic sulphur pollution.

12. Rainfall statistics are included on one $SO_2$ graph because rain is generally supposed to influence the pollution by $SO_2$ at or near ground level. It will be seen that the rainfall bears no significant relationship with the pollution figures. Once again, the domestic source of this pollution may be an explanation, since such pollution is released at a low level and does not need to be "washed down" to the gauges.

### Conclusions

13. From the data so far available, it would appear that—
(a) industrial dust pollution has decreased over the period ;
(b) sulphur pollution over the town itself is increasing ;
(c) sulphur pollution in the winter is some 55% - 60% greater than in the summer ; and
(d) domestic fires appear to be responsible for a considerable proportion of the sulphur pollution over the town and for a very high proportion of the winter increase.

14. It should be noted that the increased use of smokeless solid fuels would not appreciably alter the trends in sulphur pollution. On the other hand, this must not deter any efforts to attain a much higher consumption of such fuels. Solid smokeless fuels (and the greater use of gas and electricity) would have beneficial effect on our atmosphere by reducing the smoke at present discharged from many domestic chimneys. Unfortunately, we have not so far undertaken the measurement of smoke, and have not, therefore, the data on the local improvements which could be achieved.

## SECTION E. Inspection and Supervision of Food.

**Milk and Dairies—**

| | |
|---|---|
| Milk purveyors on register ... ... ... | 5 |
| Supplementary licenses—pasteurised ... | 5 |
| Supplementary Licenses—T.T. ... ... | 4 |
| Dairies (storage only) ... ... ... | 2 |

(There are no dairy farms in the district).

**Ice Cream—**

| | |
|---|---|
| Manufacturers in district ... ... | 3 (all cold mix) |
| Retailers in district ... ... ... | 26 |
| Vehicles from outside district ... ... | 3 |

Fifty-nine samples were taken for bacteriological examination and consisted of the following :— Grade 1 ... 55%.
Grade 2 ... 40%. Grade 3 ... Nil Grade 4 ... 5%.

**Food.**—Food condemned during the year as unfit for human consumption comprised the following :—

| *Article* | *No. Tins/Jars* | *Article* | *No. Tins/Jars* |
|---|---|---|---|
| Tomatoes | 29 | Stewed Steak | 80 |
| Fruit | 120 | Rabbit | 3 |
| Milk | 26 | Fish | 29 |
| Cream | 3 | Cereal | 35 |
| Canned Vegetables | 110 | Jam | 14 |
| Soup | 12 | Tomato Paste | 6 |
| Chocolate Rolls | 49 | Meat Pies | 24 |
| Luncheon Meat | 32 | Fish Cakes | 15 |
| Faggots | 48 | | |

| *Article* | *Weight/lbs.* | *Article* | *Weight/lbs.* |
|---|---|---|---|
| Ham | 150 | Tomatoes | 50 |
| Jellied Veal | 38 | Cheese | 16 |
| Tongue | 9 | Frozen Eggs | 20 |
| Sausages | 141 | Biscuits | 9 |

Total weight surrendered 1,200 lbs.

**Inspections made during 1953 :**

| | | | |
|---|---|---|---|
| Butchers' Premises | 57 | Factories—Escapes in Case of Fire | 3 |
| Bakehouses | 20 | P.H.A. Workplaces | 15 |
| Ice Cream Manufacturers | 29 | Halls and Cinema | 9 |
| Ice Cream Retailers | 80 | Shops Act | 6 |
| Ice Cream Vehicles | 9 | School Lavatories | 8 |
| Cafes and Eating Houses | 59 | Water Supplies | 20 |
| School Canteens | 25 | Swimming Pool | 1 |
| Other Canteens | 46 | Septic Tanks and Cesspool | 1 |
| Fishmongers | 65 | Water Courses | 4 |
| Public Houses | 7 | Vermin | 23 |
| Food Preparing Premises | 7 | Rodent Control | 225 |
| Hawkers of Food | 11 | Common Yards and Passages | 110 |
| Hawkers Patrols | 2 | Atmospheric Pollution | 195 |
| Dairies | 2 | Smoke Observations | 11 |
| Milk Shops | 7 | Camps and Hostel | 27 |
| Other Food Shops | 636 | Camps—Huts | 132 |
| Infectious Disease | 78 | Pigsties | 30 |
| Investigation of complaints | 463 | Stables | 1 |
| Reinspections | 524 | Keeping of Animals | 68 |
| Drainage—Inspections | 45 | Public Conveniences | 74 |
| Drainage—Tests | 23 | Overcrowding | 73 |
| Drainage—Tests—Faults Found | 10 | Outworkers | 1 |
| Petroleum Registration | 10 | Fairgrounds | 3 |
| Factories—Mechanical | 34 | Hairdressers | 1 |
| Factories—Building Works | 22 | Miscellaneous | 319 |

**Public Cleansing—**

| | | | |
|---|---|---|---|
| Complaints Investigated ... | 159 | Dustbins—Reinspections | 210 |
| Inspections—Tip ... ... | 234 | | |
| Inspections—General ... | 724 | **Market—** | |
| Dustbins—Primary Inspections ... ... ... | 1707 | Visits ... ... ... ... ... | 66 |
| | | Food Stalls inspected ... | 677 |

## SECTION F. Infectious Diseases.

There were 110 notifications during the year.

**Scarlet Fever.**—The incidence of Scarlet Fever was much higher than in recent years. The disease was mainly mild in character, one case was removed to hospital. All the patients recovered.

**Measles.**—There were 61 notifications received as against 258 in the previous year. The patients were nursed at home and all recovered.

**Poliomyelitis.**—Three notifications of non-paralytic Poliomyelitis were received and were removed to hospital. Two subsequently were found not be to suffering from Poliomyelitis and were discharged. The other case made a complete recovery.

Three cases of Measles and one case of non-paralytic, non-bulbar Polioencephalitis from the area were notified to Kettering Borough. All these cases made complete recovery.

## TUBERCULOSIS

Public Health (Prevention of Tuberculosis) Regulations 1925. The regulations empower the Council to prevent persons suffering from Tuberculosis to engage in the milk trade. No action was taken during 1953.

Twenty cases of respiratory and four cases of non-respiratory Tuberculosis were notified during the year. Five of the respiratory cases and two of the non-respiratory cases were patients who already suffered from Tuberculosis and removed into Corby during the year.

There were four deaths from respiratory and one from non-respiratory Tuberculosis during the year.

The number of cases in the Register at the end of 1953 was as follows :—

| RESPIRATORY | | | NON-RESPIRATORY | | | |
|---|---|---|---|---|---|---|
| *Males* | *Females* | *Total* | *Males* | *Females* | *Total* | *Grand Total* |
| 48 | 46 | 94 | 9 | 12 | 21 | **115** |

During the year five cases of Respiratory Tuberculosis left the area for other districts and three cases of Respiratory Tuberculosis were removed from the Register as cured.

## MONTHLY INCIDENCE OF NOTIFIABLE DISEASES (Other than Tuberculosis) 1953

| Disease | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Scarlet Fever ... ... ... | 3 | 6 | 1 | 2 | — | 2 | 10 | — | — | 1 | 5 | 5 | 35 |
| Whooping Cough ... ... | — | — | — | — | 1 | — | — | — | 1 | 1 | 1 | — | 4 |
| Measles ... ... ... ... | 11 | — | — | 1 | 5 | 2 | 2 | — | 1 | 36 | 2 | 1 | 61 |
| Pneumonia ... ... ... | — | — | 2 | — | 1 | — | — | — | — | 1 | — | 2 | 6 |
| Puerperal Pyrexia ... ... | — | — | — | — | — | 1 | — | — | — | — | — | — | 1 |
| Non-Paralytic Poliomyelitis | — | — | — | — | — | — | — | — | 3 | — | — | — | 3 |
| TOTALS ... ... | 14 | 6 | 3 | 3 | 7 | 5 | 12 | — | 5 | 39 | 8 | 8 | 110 |

## AGE INCIDENCE OF NOTIFIABLE DISEASES (Other than Tuberculosis) 1953

| Disease | -1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-15 | 15-20 | 20-35 | 35-45 | 45-65 | 65 & over | All Ages | Removed to Hospital | Deaths | Age Unknown |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Scarlet Fever | 1 | 3 | 7 | 1 | 9 | 12 | 1 | 1 | — | — | — | — | 35 | 1 | — | — |
| Whooping Cough ... | — | 1 | 1 | 1 | 1 | — | — | — | — | — | — | — | 4 | — | — | — |
| Measles ... | 8 | 11 | 9 | 7 | 16 | 9 | 1 | — | — | — | — | — | 61 | — | — | — |
| Pneumonia ... | — | — | — | — | — | 1 | — | 1 | 2 | — | 2 | — | 6 | — | — | — |
| Puerperal Pyrexia ... | — | — | — | — | — | — | — | — | — | — | — | — | 1 | — | — | 1 |
| Non-Paralytic Poliomyelitis | — | — | — | 1 | — | 1 | 1 | — | — | — | — | — | 3 | 3 | — | — |
| TOTALS | 9 | 15 | 17 | 10 | 26 | 23 | 3 | 2 | 2 | — | 2 | — | 110 | 4 | — | 1 |

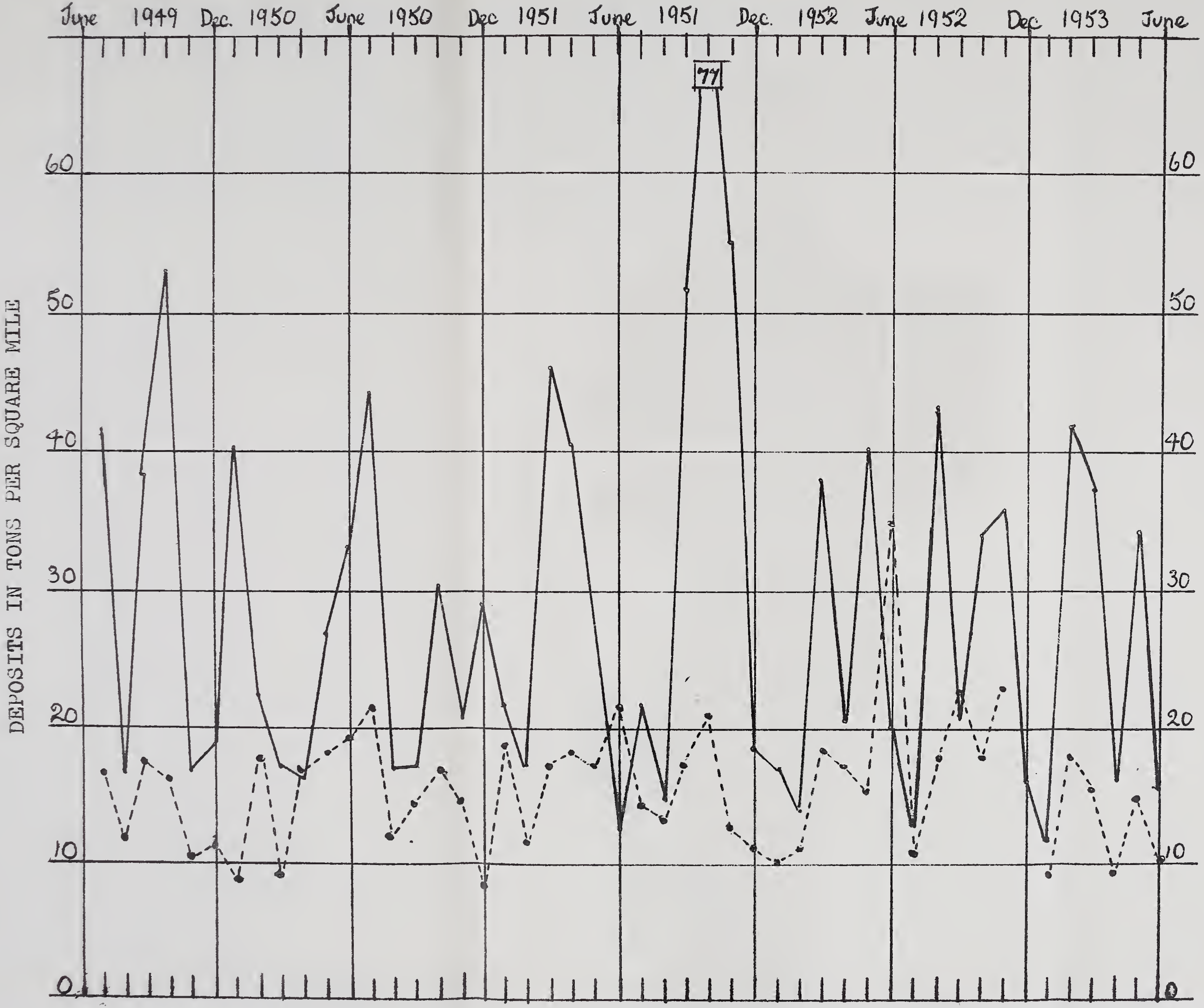
## NEW CASES OF TUBERCULOSIS, 1953

| | Respiratory | | Non-Respiratory | |
|---|---|---|---|---|
| Age Period | Male | Female | Male | Female |
| 0— | — | — | — | — |
| 1— | 1 | 1 | — | — |
| 5— | — | 2 | — | — |
| 15— | 1 | 4 | 1 | — |
| 25— | 1 | 5 | 2 | 1 |
| 35— | 1 | 1 | — | — |
| 45— | 3 | — | — | — |
| 55— | — | — | — | — |
| 65— | — | — | — | — |
| TOTALS | 7 | 13 | 3 | 1 |

## DEATHS FROM TUBERCULOSIS, 1953

| | Respiratory | | Non-Respiratory | |
|---|---|---|---|---|
| Age Period | Male | Female | Male | Female |
| 0— | — | — | — | — |
| 1— | — | — | — | — |
| 5— | — | — | — | — |
| 15— | — | — | 1 | — |
| 25— | *2 | — | — | — |
| 35— | — | — | — | — |
| 45— | — | — | — | — |
| 55— | 2 | — | — | — |
| 65— | — | — | — | — |
| TOTALS | 4 | — | 1 | — |

*One of these patients died in Hospital in Kettering Borough and the death has been notified as occurring in the Borough.



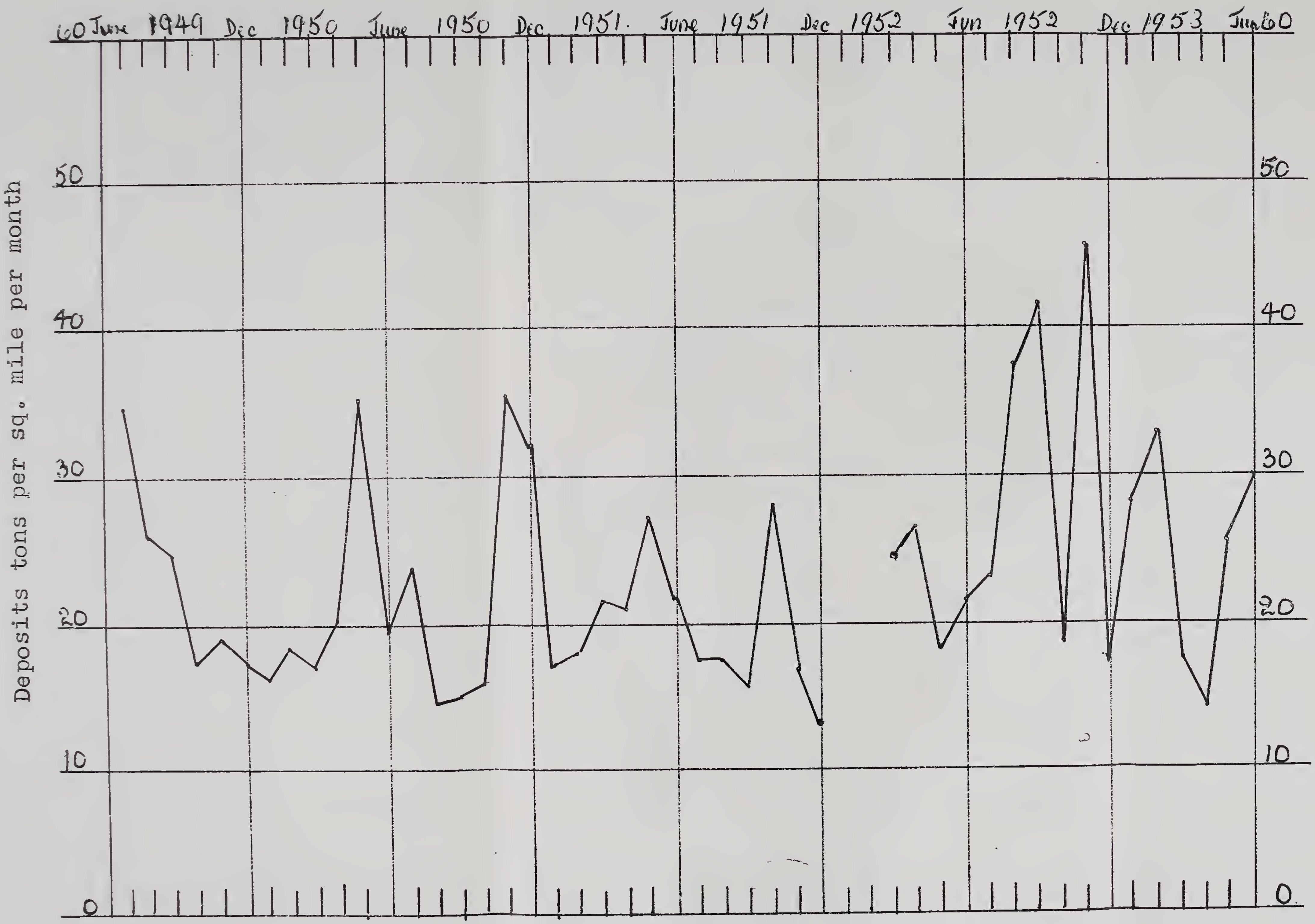
## URBAN DISTRICT COUNCIL OF CORBY

Graphs of monthly deposits in two standard gauges July, 1949 to June 1953.

Secondary Modern School ____

Clarke Rd./Rowlett Rd. ----

(Note: December 1952 - gauge transferred from Clarke Roa
to Rowlett Road.)



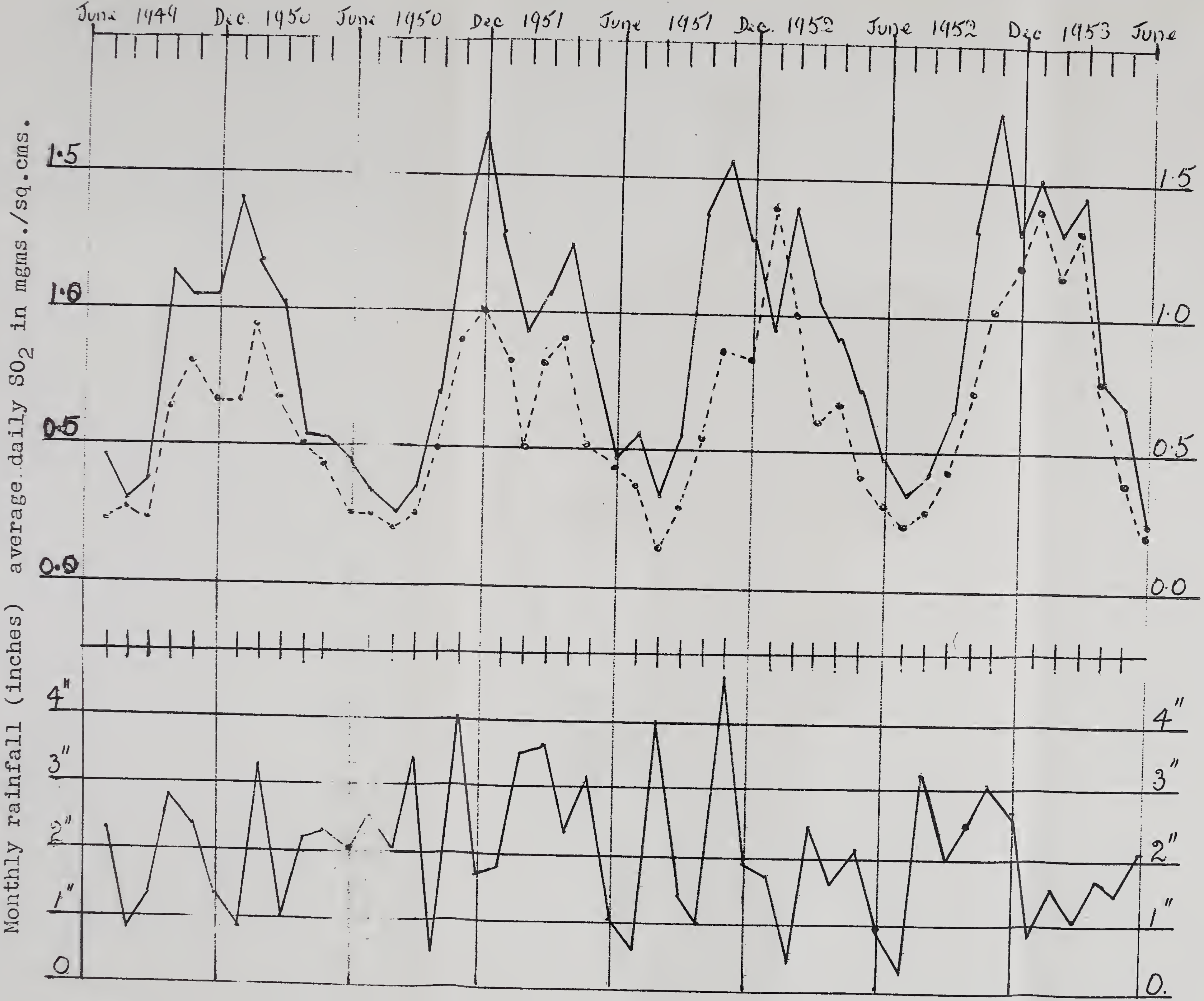
## URBAN DISTRICT COUNCI
## OF CORBY

**STANION LANE**

**Standard Deposit Gauge**

**NOTE:**

No figures for January and February, 1952

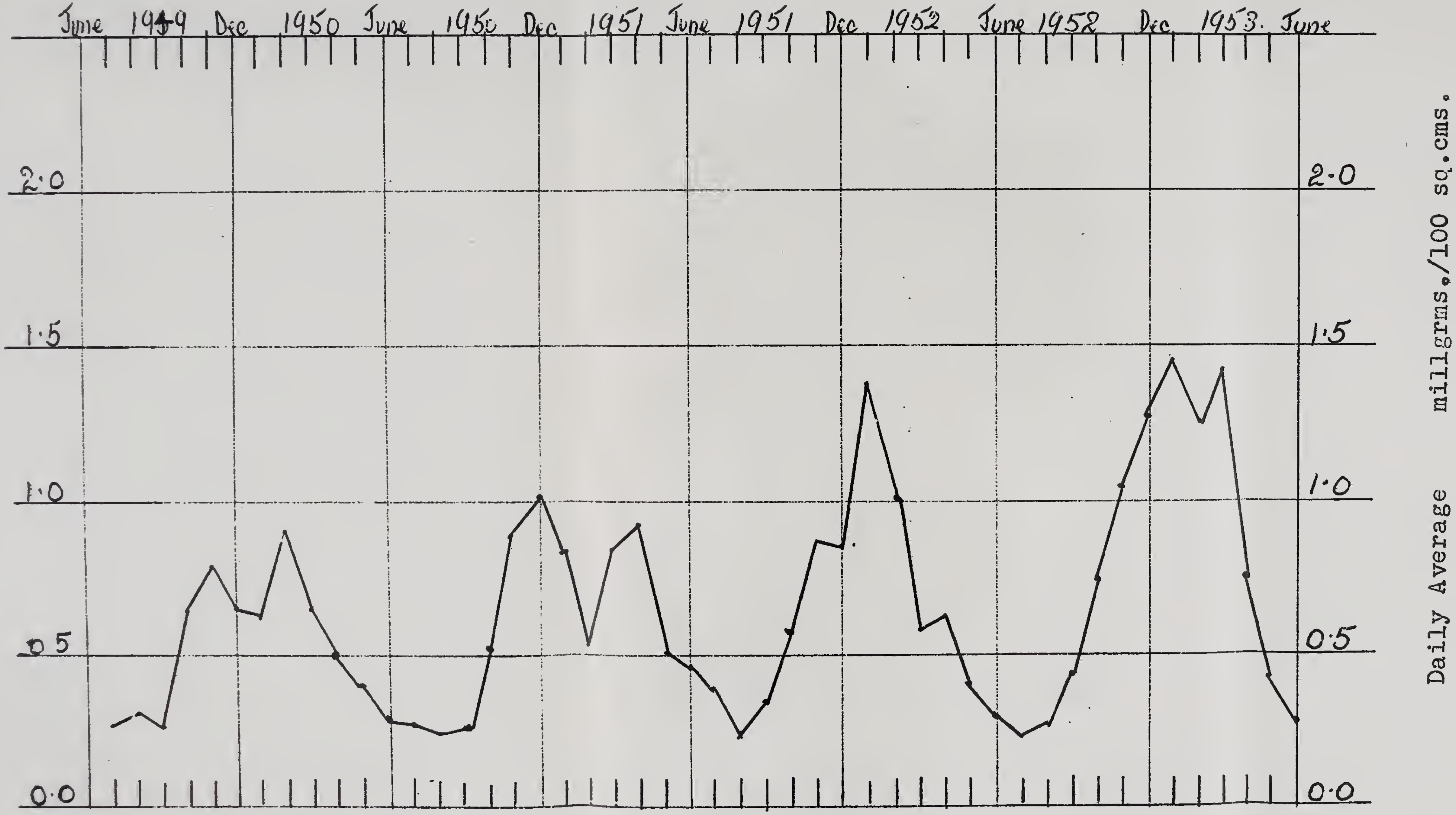


URBAN DISTRICT COUNCIL
OF CORBY

Graphs of average daily $SO_2$ per month, July 1949 to June 1953.

Secondary Modern School ____
Clarke Rd./Rowlett Rd. -----

(Note: Pbo gauge transferred from Clarke Road to Rowlett Road - 1st. December, 1952.)



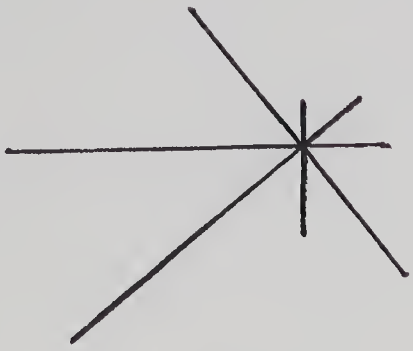
## URBAN DISTRICT COUNCIL OF CORBY

## STANION LANE

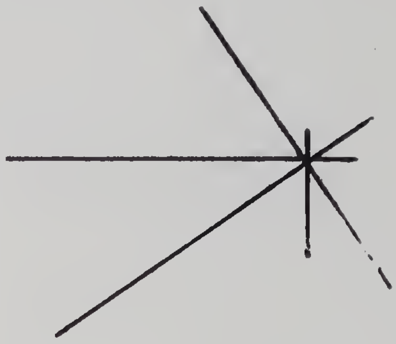
Lead Peroxide Gauge

Readings of $SO_2$

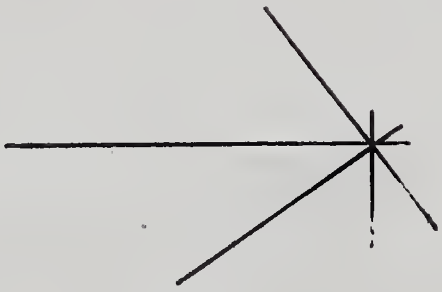
# URBAN DISTRICT COUNCIL OF CORBY



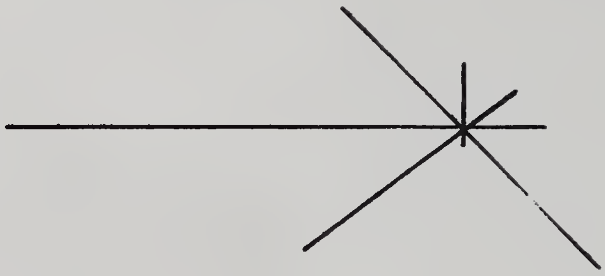
1949-50



1950-51

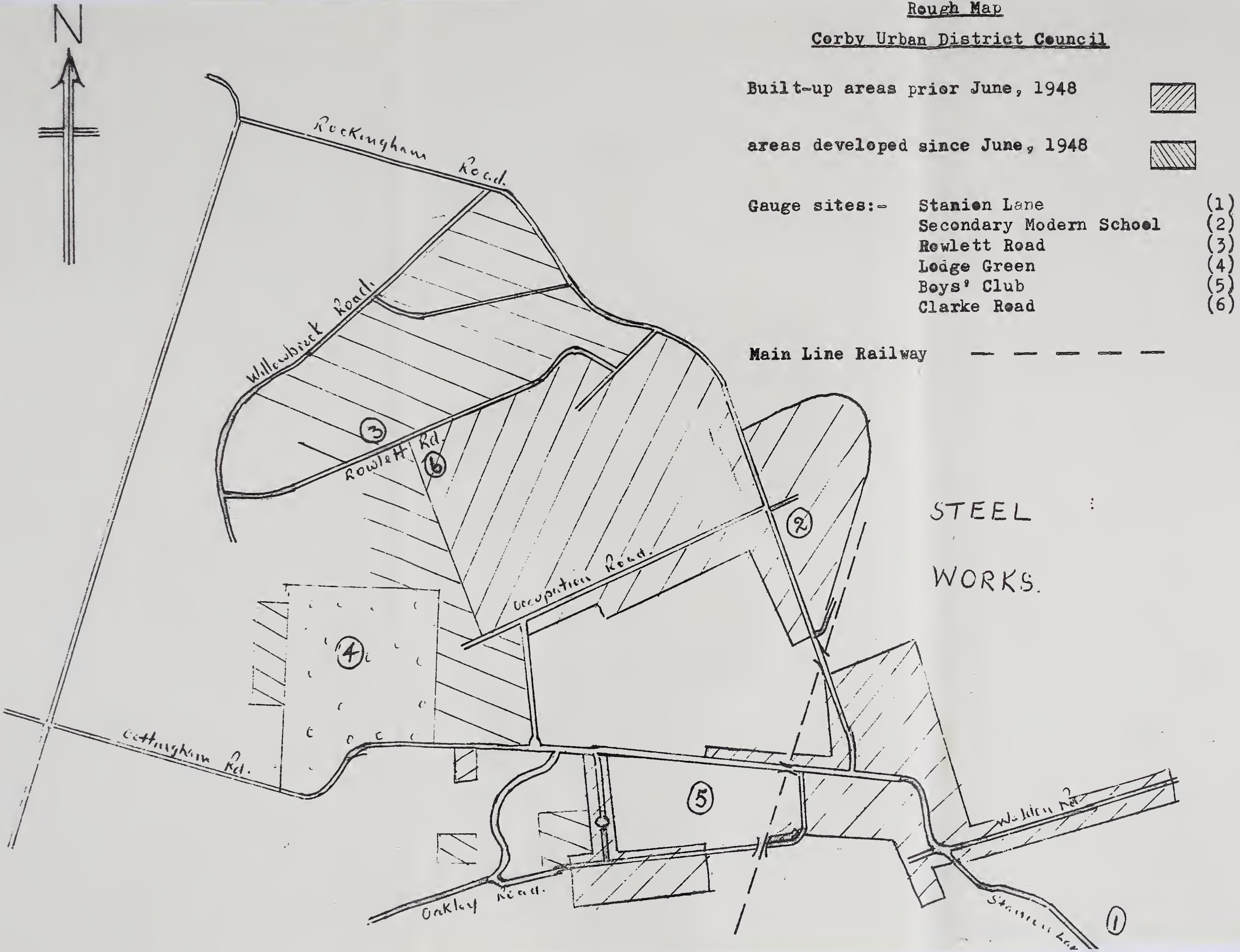


1951-52



1952-53

Diagram showing proportionate wind directions in each year indicated. Wind observations made at midday each day, and no allowance made for variations in the following twenty-four hours.



## Rough Map

## Corby Urban District Council

Built-up areas prior June, 1948 ▨

areas developed since June, 1948 ▨

Gauge sites:-

| | |
|---|---|
| Stanion Lane | (1) |
| Secondary Modern School | (2) |
| Rowlett Road | (3) |
| Lodge Green | (4) |
| Boys' Club | (5) |
| Clarke Road | (6) |

Main Line Railway — — — — —